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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/916,611	07/27/2001	Greg Volgas	HCC-011 (306*142)	8709
23416 7590 01/29/2009 CONNOLLY BOVE LODGE & HUTZ, LLP P O BOX 2207 WILMINGTON, DE 19899				
EXAMINER				
PRYOR, ALTON NATHANIEL				
ART UNIT		PAPER NUMBER		
1616				
MAIL DATE		DELIVERY MODE		
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

09/916,611

**Applicant(s)**

VOLGAS ET AL.

**Examiner**

ALTON N. PRYOR

**Art Unit**

1616

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 November 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 3-18, 20-28, 30-39, 41-48, 50-65, 82-85, 87, 89 and 91 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3-18, 20-28, 30-39, 41-48, 50-65, 82-85, 87, 89 and 91 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

Applicant's arguments filed 11/17/08 have been fully considered but they are not persuasive. See argument below.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1,3-18,20-28,30-39,41-48,50-65,82-85,87,89 and 91 are rejected as being obvious over USPN 5558806 and USPN 5078782. USPN '806 teaches a composition comprising acid pesticides such as 2,4-D, dicamba, triclopyr, picloram or copyralid and a surfactant blend comprising a polyalkyleneoxide polysiloxane and an organic compound such as block copolymers of ethylene oxide and propylene oxide, polyethylene oxide, mono-polyglucoside, alcohol alkoxyate, phosphate ester, ethoxy sulfate, etc. and optionally a crop oil concentrate, i.e., mineral oil or methylated soybean oil. See abstract, column 2 lines 21 – column 4 line 27, column 6 lines 26-42, column 9 line 52 – column 10 line 2, Example 4. USPN '806 discloses that the concentration of the pesticide active ingredient ranges from about 2 to about 75% by weight of the composition and preferably ranges in an amount of from about 4 to about 40%. USPN '806 teaches that the weight ratio of pesticide to surfactant blend ranges from about 1:99 to about 99:1 and ranges preferably from about 40:60 to about 60:40. See column

9 lines 19-23,32-36. The '806 patent teaches a surfactant such as octyl alcohol ethoxylate (alcohol alkoxyate) can be added to the composition. The alcohol alkoxyate surfactant is recited in the instant claims. The '806 patent is silent to the amount of octyl alcohol ethoxylate and therefore silent to the ratio of acid herbicide to octyl alcohol alkoxyate. In the absence of unexpected results, it would have been obvious to one having ordinary skill in the art to determine the optimum amount and ratios of ingredients in order to produce a stable and effective composition. See column 3 line 38 – column 6 line 43. USPN '806 does not teach the instant invention comprising the ester of 2,4-D and an aromatic solvent. However, USPN '782 teaches pesticidal concentrates comprising 1-55% by weight of pesticides such as the ester of 2,4-D, dichlorprop or MCPA, 20-90% by weight of the oily surfactants such as mineral oil, spindle oil and vegetable oils (soy oil, rape seed oil, olive oil) and 1-45% by weight of a surfactant such as block polymers of ethylene and propylene oxide, polyalcohol, ethoxylated, propoxylated and co-ethoxylated/propoxylated polyalcohols, etc. plus aromatic solvents. See column 12 lines 14-22, column 10 lines 7-30, and column 8 lines 3-37. It would have been obvious to one having ordinary skill in the art to combine the compositions taught in USPN '806 and '782 to arrive at an invention comprising 2,4-D, ester of 2,4-D, a mineral oil or methylated soybean oil, a polyalkyleneoxide polysiloxane and an aromatic solvent. It would have been obvious to for one try this combination since both individual patents teach the same utility.

*Response to Applicants' Argument*

The Applicants argue that the polysiloxane (silicone based) surfactant disclosed by Policello is unstable in acidic conditions, below pH 5. The Applicants direct the Examiner's attention to USPN 6300283 to support the instability of the instant polysiloxane at acidic pH. The Applicants state, "While not specifically disclosed in the in the applicant's application, the compositions the applicant describes have pH ranges generally well below 5.0." The Applicants refer the Examiner's attention to a Declaration and ASTM Publication STP 1234 filed 5/13/08 to support the instability of the polysiloxane at low pH. The Examiner argues that a pH requirement is not specified in the claims. The Examiner acknowledges that the silicone- based surfactants are excluded from the claims. Therefore, the "polysiloxane" surfactant has been deleted from the claims. For this reason, no further argument on the part of the Examiner regarding "polysiloxane" is necessary.

Applicants argue that Policello does not teach anything about 2,4-D in acid form with a surfactant. Assuming that Policello teaches something about 2,4-D acid, there is still no motivation to omit solvent. The Examiner reiterates that Policello does teach a combination of 2,4-D in acid form with a surfactant. See abstract, column 2 lines 21 – column 4 line 27, column 6 lines 26-42, column 9 line 52 – column 10 line 2, Example 4. The claims employ consisting essentially of language which does not necessarily omit solvent. For this reason Policello would not be required to omit solvent.

Applicants argue that the Declaration by J. Roberts points out that silicone surfactants according to Policello are unstable in the inherent acidic conditions. The

acid herbicide would not dissolve in the silicone surfactant. Applicants argue that the Declaration of Roberts filed 5/13/08 and the USPN '283 were used to demonstrate that Policello did not consider using the acid form of the herbicide. The acid herbicide would not fully dissolve in the silicone surfactant according to Policello, without significant degradation of the silicon surfactant. The Examiner argues that Policello teaches that the weight ratio of acid pesticide to surfactant blend ranges from ranges preferably from about 40:60 to about 60:40. See column 9 lines 19-23,32-36. Also note that the Declaration only provides data for the composition comprising 85% of a C11 alcohol with 3 moles of ethylene oxide and 15% 2,4-D acid. The results show that the 15% 2,4-D is fully soluble in 85% surfactant. The claims are much broader than the scope of the unexpected result. The surfactant, 85% of a C11 alcohol with 3 moles of ethylene oxide, is not specifically claimed. The 2,4-D acid is the only tested. The amount of surfactant present is 85% which is much greater than the 15% of 2,4-D acid used. However, the claim recites that the amount of acid pesticide and surfactant can be present in equal amounts. USPN '283 suggest the that the silicone surfactant used in Policello would be stable at acidic pH ranging from 5 to 6.9. Applicants provide no data demonstrating that the scope to the acid herbicides claimed would not be soluble in the silicone surfactants of Policello.

Applicants point out that prior art documents AF-300 and Weedone 638 disclose a surfactant in combination with 2,4-D acid. In addition, the Applicants point out that the documents do not teach or suggest the use of a higher level of the surfactant to dissolve the 2,4-D acid. The Applicants also point to other sources: Formulation Science,

Pesticides and Formulation Technology and Auxiliaries for agrochemical formulations, to show that emulsifiers (surfactants) are not used as solvents. Applicants further argue that the Examiner does not address where the prior art teaches the acid herbicide being fully dissolved in the surfactant which is a requirement of the present claims. The Examiner reiterates that Policello teaches combinations acid pesticides to surfactant ranging from 40:60 to 60:40. See column 9 lines 19-23,32-36.

The Applicants argue that Policello acknowledges 2,4-D and dicamba are in a laundry list of pesticides at column 6, line 25 – column 8, line 53. Applicants do not believe that Policello intended to dissolve 2,4-D in acid form or dicamba in acid form in the silicon surfactants of Policello. The Examiner reiterates that Policello teaches combinations of acid pesticides to surfactant ranging from 40:60 to 60:40. See column 9 lines 19-23,32-36. Policello does not have to preferably teach or exemplify the use of 2,4-D acid or dicamba acid in order to render the invention obvious. Policello does suggest the use of 2,4-D acid or dicamba acid by their mere disclosure which makes the instant combination of 2,4-D acid or dicamba acid and silicon surfactant obvious.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

***Telephonic Inquiry***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALTON N. PRYOR whose telephone number is (571)272-0621. The examiner can normally be reached on 8:00 a.m. - 4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann Richter can be reached on 571-272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Alton N. Pryor/  
Primary Examiner, Art Unit 1616



